



**Remarks
Of
Ross J. Pillari
President, BP Products North America Inc.
Texas City Investigation Report Press Briefing
May 17, 2005**

Good morning. Thank you for coming.

I am Ross Pillari, president of BP Products North America.

With me today are Tim Holt and Pat Gower.

Tim is a senior executive in BP's US exploration and production organization. He and John Mogford, group vice president exploration and production, led the company's investigation of the March 23 explosion and fire. Tim helped author the interim accident investigation report we are making public today.

Pat is vice president, refining for BP Products North America.

Tim and Pat are here to help me answer your questions. We have a lot of material to share with you, so we ask that you hold your questions until the end of our presentation.

I'd like to begin today's press conference by reminding everyone that on March 24, John Browne, Chief Executive Officer of the BP Group and I came here to Texas City and made several commitments.

John pledged BP's full resources to determine the cause of the March 23 explosion and fire. He promised the company's full cooperation to government agencies investigating the accident. And he said that BP would take the actions necessary to prevent a recurrence.

He said BP would provide support to the victims of this tragedy and their families.

And finally, he emphasized that at BP we have a very simple rule: We accept responsibility for what happens inside the boundaries of our plant and this incident is no exception.

Today, we are here to tell you what we have done -- and what we plan to do -- to deliver on these commitments.

Our investigation team has been working since March 26. On Friday they delivered to me an unflinching interim report which concludes that a series of failures by BP



personnel before and during the startup of the Isomerization unit led to an explosion and fire that claimed the lives of 15 people and injured more than 170.

The team also made recommendations for preventing a similar incident and assuring the safe operation of the refinery.

We have shared the interim investigation report and all of the evidence gathered by the BP investigation team with OSHA and the US Chemical Safety Board.

Some of the team's recommendations have already been implemented. Others are in progress. We will address and take action on each recommendation in the report.

Since the accident, we have offered support and assistance to those whose lives were forever changed by this accident. We regret that our mistakes have caused so much suffering. We apologize to those who were harmed and to the Texas City community.

We cannot change the past or repair all the damage this incident has done. But we can assure that those who were injured and the families of those who died receive financial support and compensation.

Our goal is to provide fair compensation without the need for lawsuits or lengthy court proceedings.

As a first step, we have started contacting the families of those who died, through their attorneys, in order to begin the process of evaluating and settling claims.

To ease the burden for the families, and to expedite and simplify that process, BP Products has agreed with the three contractors whose workers died to assume responsibility for compensating their injured employees and the families of those who died.

We are keeping another important commitment today -- the commitment we made to make public the findings and recommendations of our investigation.

Before doing that, I'd like to thank Tim and the rest of the investigation team for doing a difficult job and doing it well. I am appreciative of their effort, and grateful for their insights and recommendations.

Since receiving the report this past Friday, we have reviewed it and conferred with investigation team members to ensure that we understand both their findings and recommendations.

Earlier this morning we shared the report with the leadership of both the Texas City refinery and BP's refining and marketing organization so that we can begin the planning required to implement many of these recommendations.

This is an interim report. The investigation team is continuing its work. The team must still analyze fluid samples taken from the ISOM unit and complete computer and engineering modeling which could enhance our understanding of the accident.

The team decided to publish an "interim" report because they do not expect that work to change the root causes of the accident or the findings and recommendations made public today.

Each of you will be provided a copy of the report at the conclusion of this press conference. We will also post the full report on the worldwide web.

It's not possible in the time available today to cover all the material in the report.

So first, I will talk about what happened, and then address the issues that have generated the most interest and which have been a primary focus of our investigation. Those issues are:

- the operating and supervision failures which led to the explosion and fire.
- the decisions to locate trailers in the vicinity of the unit
- and, the use of a blow down stack as part of the pressure relief system on the Isomerization unit

The investigation determined the explosion occurred because BP Products employees who were operating and managing the startup of the ISOM unit greatly overfilled and then overheated the Raffinate Splitter, a tower that is part of the ISOM unit.

The fluid level in the tower at the time of the explosion was nearly 20 times higher than it should have been. The level should have been at 7 feet but was estimated at nearly 140 feet.

The fluids in the tower were heated too quickly. At the time of the explosion the base temperature was 302 degrees Fahrenheit, 25 degrees higher than it should have been.

The presence of water or nitrogen in the tower at startup may have also contributed to a sudden increase in pressure that forced a large volume of hydrocarbon liquid and vapor into the adjacent blow down stack, quickly exceeding its capacity.

The resulting vapor cloud was ignited by an, as yet, unknown source.

If ISOM unit management had properly supervised the startup or if ISOM unit operators had followed procedures or taken corrective action earlier, the explosion would not have occurred.

The presence of workers in temporary trailers near the blow down stack and the failure to evacuate personnel when it became apparent pressure was building in the ISOM unit and that vapors were being vented to the atmosphere greatly increased the number of deaths and injuries.

The decision to place the trailer near the blow down stack was preceded by a hazard review that did not recognize the possibility that multiple failures by ISOM unit personnel could result in such a massive flow of liquids and vapors to the blow down stack.

The report notes that given this massive flow the use of a flare system, instead of a blow down stack, would have reduced the severity of the incident.

The mistakes made during the startup of this unit were surprising and deeply disturbing. The result was an extraordinary tragedy.

At this point, Pat Gower will contrast what should have occurred during the startup of the Raffinate Splitter with what did happen.

(Pat Gower explains ISOM unit diagram)

Now that Pat has described the procedural issues related to the overflowing of the splitter, which was the fundamental cause of the incident, I'd now like to comment further on the history of the F-20 blow down stack.

This stack had been used for pressure relief in the Texas City refinery without major incident for more than 50 years.

Installed in 1953, it consists of a vertical drum, 10 feet in diameter, with a 113 foot high stack. The blow down system is designed to receive, quench and dispose of hot liquid and or hydrocarbon vapors from the ISOM unit during startups, shut downs and upsets.

It was not designed to receive and contain the massive volume of liquid that poured into it March 23.

Vapors are dispersed out the top of the stack and liquids flow out of the drum through a gooseneck into the refinery's closed petroleum sewer system to an oily water separator.

This is not state-of-the-art technology. However, blow down stacks have been, and continue to be operated safely in Texas City and in refineries around the world. Standard industry practice and guidelines allow their use.

Use of blow down stacks has been phased out in many locations. We believe this is because in some services they are not capable of meeting stringent air quality standards or in some circumstances, a choice is made to relieve pressure to closed system or flares because of the perceived risk of venting light end, heavier than air vapors.

In 1977 Amoco issued Process Safety Standard 6 which addressed blow down stacks and other relief systems. In 1986 Process Safety Standard 6 was revised to require replacement of blow down stacks with flares or other relief systems when existing blow down stacks were deemed too small.

A 1994 revision to Amoco's Process Safety Standard 6 called for replacement when existing facilities underwent major modification.

The F-20 blow down system was designed to handle hydrocarbon vapors from one relief line during unit upsets or shutdowns. Since its commissioning, design and operational changes have added two relief inlet lines from the ISOM unit. The investigation team sought but did not find a documented capacity analysis of the change.

In 1997, the F-20 blow down system was rebuilt, with no major changes in scale or operation of the unit.

In 2003, BP, as a result of changes in splitter tower condition, the raffinate splitter relief valve set points were reduced from 70 psi to a range of 40 - 42 psi. Again, the investigation team sought but did not find an analysis of the impact of this change on the blow down system.

The investigation team did find a reference to a study done in the 1990's by an external engineering firm which said the relief valves and blow down system were adequate.

But again the investigation team could not find the report prepared by the outside engineers.

None of these changes triggered replacement of the F-20 blow down system under Process Safety Standard 6.

However, while not required, there were two occasions, in 1995 and in 2002, when opportunities to take the raffinate splitter relief lines to a flare system existed. Because the level of explosion risk associated with this operation was not fully recognized, no action was taken to change the configuration.

The investigation team concluded:

- That changes in the design and operation of the raffinate splitter resulted in increased use of the blow down stack.
- That conversion to a flare system would have decreased the severity of the incident

- And finally, the report noted that decommissioning the quench system, failure to replace the internal baffles and the addition of two inlet lines might have reduced the effectiveness of the blow down stack in normal operations. However, these factors would not have prevented or reduced the impact of the March 23 explosion.

Prior to March 23, this blow down system remained in use because process hazard reviews did not recognize the possibility that multiple procedural failures by ISOM unit supervisors and operators could result in such a massive flow of fluids and vapors to the blow down stack.

Operated properly, we believed the unit was safe. Operated properly, we still believe the unit is safe.

Nevertheless, the events of March 23 have made clear to us the value of modifying our facilities and stopping the practice of using blow down stacks to vent light-end, heavier than air hydrocarbons to the atmosphere.

Now I'd like to talk about the decisions to locate trailers near the ISOM unit.

Those decisions flowed from hazard reviews that did not recognize the possibility that multiple failures by operations personnel could result in such a massive flow of fluid and vapor to the blow down stack.

The trailer location by the catalyst warehouse has been used for many years.

The Texas City Refinery has a management of change process to evaluate hazards associated with the placement of temporary structures at the Texas City site.

This process is designed to ensure that the trailers themselves are safe to use and that the trailers are put in a safe place.

At Texas City, additional analysis was required if the trailer was to be placed less than 350 feet from the nearest process unit. The additional analysis considers the types and quantities of hazardous materials, potential ignition sources and the prevailing winds.

The J E Merit double wide trailer was installed within 150 feet of the F-20 blow down stack which had not been identified as a realistic or likely hazard source in previous studies.

Our Management of Change process did not consider the possibility of such a significant release of hydrocarbons from the stack.

The hazard analysis for the JE Merit trailer was consistent with earlier reviews.

For example, in 1997, when the refinery completed a comprehensive study of occupied buildings on the site, the area adjacent to the ISOM unit was not identified as an area of concern for the location of trailers.

A 2002 facility siting study reviewed placement of trailers in the same area and concluded the trailer siting was acceptable.

The report notes that the JE Merit trailer was installed and occupied before the MOC process was fully completed. While the completion of this process was not timely, the investigation does not indicate it contributed to the incident.

* We have yet to pinpoint the ignition source. Consistent with the assessment of the area at the time, electrical connections, light switches and power outlets in the trailers were not airtight and were potential ignition sources. More than 30 vehicles, also potential ignition sources, were parked in the vicinity of the trailers. Witness statements suggest an idling truck engine could have been the source, but this is not confirmed.

Placement of the trailers near the ISOM unit and the presence of non-essential personnel in the vicinity of the ISOM unit, particularly during the startup operation, greatly increased the number of casualties caused by the explosion.

Prior to the receipt of the report and the final recommendations, the team at the refinery anticipated some of the recommendations and has already taken actions to address both this issue and some of the others I have mentioned.

They have clarified and reinforced roles, responsibilities and expectations around startup, operating and evacuation procedures and have taken action to ensure that procedures are followed.

They have prohibited the occupancy of trailers within 500 feet of blow down stacks and flares and all non-essential personnel are being moved out of process areas.

As recommended in the report, we will commission a new facility siting study, to be led by an independent third party.

Supervisors are now and will be present at their units whenever complex operations are underway.

Shift changes now entail documented handover discussions.

The refinery team will now move forward to implement the other recommendations from the investigation report.

We will eliminate the venting of all heavier than air hydrocarbon vapors from blow down drums and stacks at our Texas City and Whiting, Indiana refineries. All heavier

than air hydrocarbon vapor and all light hydrocarbon liquids will be routed to closed systems, flares or other process units.

We will seek to expeditiously modify these 12 units. We have already begun the preliminary engineering design for these changes. Following the receipt of permits we will schedule the installations.

This work will be accompanied by a comprehensive examination of all process related atmospheric relief systems at Texas City and at all other BP-operated refineries to assess the need for additional system modifications and additional procedures to ensure their safe operation.

To drive implementation of the recommendations in the report, the company has appointed Colin MacLean manager of the Texas City site.

Colin has previously managed BP refineries in Australia, Scotland and Whiting, Indiana. He is one of our most experienced operations managers. He will focus his full and undivided attention on the safe operation of the site.

Don Parus, the current Refinery Manager will be on leave from his normal duties in order to provide full time support to the ongoing efforts required to respond to the incident.

To provide additional assurance about processes and procedures at the refinery, BP will complete a process and operations review of the refinery.

The review will address all aspects of our Texas City operations from our procedures and training to process safety and maintenance.

The review, which began May 9, is being led by former Deputy Assistant Secretary for OSHA James W. Stanley.

X Finally, the failure of supervisors to provide appropriate leadership and the failure of hourly workers to follow written procedures are among the root causes of this incident.

Supervisors did not verify correct procedures were being used or followed by unit operators. They were absent from the unit during critical periods. There was confusion about who was in charge.

X When it was apparent things were going wrong, unit operators failed to activate evacuation alarms, denying other workers the opportunity to get out of harm's way.

We cannot ignore these failures.

For that reason, we have begun disciplinary action against both supervisory and hourly employees directly responsible for operation of the Isomerization Unit on March 22 and 23.

As our investigation continues, and as our understanding of what happened and why improves, we may be required to discipline others. The actions taken will range from warnings to termination of employment.

In closing, I'd like to summarize by saying that 8 weeks ago we promised that BP would investigate the incident, determine what went wrong, make its findings and recommendations public and take action to prevent a recurrence.

While much has been accomplished, there is far more to do.

In the coming weeks we will be working to provide fair compensation for those harmed by our mistakes. On behalf of BP and all of our employees worldwide, I want to say we deeply regret the suffering we have caused.

We will also be implementing the recommendations contained in today's report and taking ongoing action to assure the community and the country that we can and will safely provide the energy consumers need.

Thank you for listening.

I'd now be pleased to take any questions you may have.